Volumetric Instruments

Precision analysis requires measuring instruments with consistently high precision. Every BLAUBRAND® volumetric instrument is individually calibrated. Statistical process controls ensure strict compliance with predefined specifications. BLAUBRAND® – quality you can rely on.

Quality from the very start.
BLAUBRAND®.

BRAND

Volumetric Instruments

Precision

The intended application determines which measuring instrument should be used. Precision analysis requires measuring instruments with consistently high precision. Even the most sophisticated automated systems will only deliver reliable results if the volumetric instruments used in preparing the samples meet the required precision.
BLAUBRAND® volumetric instruments represent the highest degree of technical perfection. They are made of glasses which are highly resistant to nearly all chemical substances – a prerequisite for durable precision.

Calibration

Every glass volumetric measuring instrument is individually calibrated. Computer-controlled systems ensure maximum precision in a fully automated production line.
'Statistical Process Control' (SPC) guarantees production of volumetric instruments with the smallest deviation from nominal capacity (accuracy) and narrow scatter of individual values (coefficient of variation).

Types of calibration

'TC, In': The contained quantity of liquid corresponds exactly to the capacity indicated on the instrument (e. g., graduated cylinders and volumetric flasks).

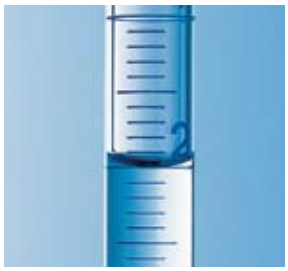
'TD, Ex': The delivered quantity of liquid corresponds exactly to the capacity indicated on the instrument (e. g., pipettes and burettes).

Silk-screening

Silk-screen printing follows calibration. BRAND uses flexible screen stencils for all graduated pipettes, burettes, graduated cylinders, and mixing cylinders. Thus, the volume markings on the stencil exactly match the calibration marks, at all capacities. Even intermediate volumes on BRAND volumetric instruments are extremely precise. For silk-screen printing BRAND uses special inks designed for volumetric instruments.

Class A/AS

Volumetric instruments of class A/AS are within the error limits defined by DIN and ISO and are according to DIN 12 600 admissible for conformity certification.



Graduation:
ring marks at major graduations

BLAU BRAND

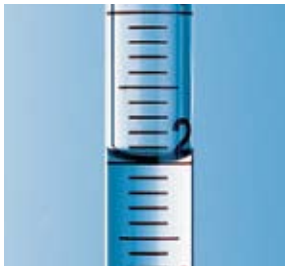
Marks and inscriptions in high contrast blue enamel. It represents the optimum combination of resistance and readability.

BLAU BRAND ETERNA

Marks and inscriptions in ETERNA amber stain. It diffuses into the glass surface and can only be removed by abrasion. It is used for volumetric instruments which are subjected to particularly aggressive cleaning methods.

Class B

Volumetric instruments of class B are within twice the error limits for class A/AS as defined by DIN and ISO.



Graduation: short graduation marks

SILBER BRAND

Marks and inscriptions in high contrast white enamel.

SILBER BRAND ETERNA

ETERNA marks and inscriptions in amber stain are particularly resistant to aggressive cleaning methods.

Firing

High quality inks combined with carefully controlled annealing processes provide durable graduations. The most modern manufacturing technology is used for controlled heating and cooling. The maximum temperature is between 400 and 550 °C, depending on the type of glass.

Quality assurance

The QM system is DIN EN ISO 9001 certified, and includes ongoing testing during the manufacturing process with final random sample testing in compliance with DIN ISO 3951 at final inspection. (See page 282 for further information.)

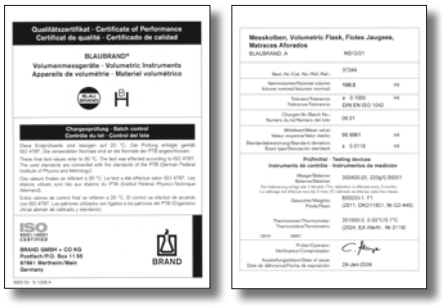
Heating of volumetric instruments

All reusable BLAUBRAND® and SILBERBRAND volumetric instruments can be heated up to 250 °C in a dry box or sterilizer without having to worry about a change in volume. Use only gradual heating and cooling because abrupt temperature changes cause thermal stress and may result in glass breakage.

BLAUBRAND® Volumetric instruments with certificate

Conformity certified

All BLAUBRAND® volumetric instruments are conformity certified. With the sign ℍ, BRAND confirms that the instruments are manufactured according to "Eichordnung", the German Federal Weights and Measures Regulations. This sign of conformity is printed directly on the instruments, according to DIN 12600.



One batch certificate per packing unit!

All reusable BLAUBRAND® volumetric instruments are supplied with one batch certificate per packing unit of the manufacturer. This facilitates the initial performance verification – also with the monitoring of measuring equipment – as the data can directly be transferred from the certificate. Certificates can also be downloaded via internet: www.brand.de.

Certificates

Batch certificate

The batch number, and mean value plus standard deviation for the batch, along with the date of issue are documented on the certificate. The measuring instrument bears the batch number that is burnt in using easy-to-read digital numbers:

09.02
(Batch number:
Year of Manufacture/Batch)

Individual certificate

The batch number, the individual serial number, the measured volume, measurement uncertainty, and the date of issue are documented on the certificate. The measuring instrument bears the batch and serial numbers that are burnt in using easy-to-read digital numbers:

09.02 0756
(Individual serial number:
Year of Manufacture/Batch/
Consecutive Instrument Number

USP Individual certificate

BLAUBRAND® volumetric instruments can be delivered with volume error limits in compliance with United States Pharmacopeia (USP). Each instrument is individually calibrated and checked. Both the instrument and the certificate show an individual serial number indicating year of manufacture, and the USP logo.

(* Volumetric flasks are also available with USP batch certificate. USP certificates cannot be provided for wide neck graduated flasks.)

DKD Calibration certificate

This certificate is issued by the DKD (German Calibration Service) calibration laboratory at BRAND. By virtue of DKD's extensive international collaborations (EA Treaty, ILAC-MRA), the DKD calibration certificate is internationally recognized. Both the instrument and the certificate show the individual serial number and the year and month of issue.

1001
DKD-K-20701
09-02

Ordering note

If you require all of your BLAUBRAND® volumetric instruments to come from one batch for statistical testing equipment monitoring, please so indicate by placing a 2 in front of the BRAND catalog number. With dealer-specific catalog numbers please add the phrase "from one batch". Please proceed in like manner when requesting individual, USP or DKD certificates.

How it's done! Ordering example:

Volumetric instrument/ Certificate		BRAND Cat. No.
100 ml	Volumetric flask **with batch certificate**	372 49
100 ml	Volumetric flask, **total order from one batch** (to the extent possible)	**2** 372 49
100 ml	Volumetric flask **with individual certificate**	**9** 372 49
100 ml	Volumetric flask **with DKD calibration certificate**	**DKD** 372 49
100 ml	Volumetric flask **with USP individual certificate**	**USP** 369 49

Single Volume Pipettes

Inscriptions on a BLAUBRAND® bulb pipette

Manufacturer

BRAND trademark for the highest quality grade volumetric instruments

Nominal volume

Error limit

Symbol for the conformity certification of BRAND, according to 'Eichordnung', the German Federal Weights and Measures Regulations and to DIN 12 600

ISO association mark

Country of origin

Reference temp. (20 °C), waiting time (5 seconds), calibration (TD, Ex = to deliver)

Class 'A', the highest quality grade, 'S' for swift delivery

DIN EN ISO 648

In the new DIN EN ISO 648, the waiting time for single volume pipettes of class AS was reduced from 15 to 5 seconds.

Single volume pipettes are frequently called bulb pipettes, as well.

Specifications, available sizes

Bulb pipettes with one or two marks, calibrated to deliver (TD, Ex).

			BLAUBRAND® waiting time 5 s	SILBERBRAND no waiting time
Capacity ml	**Color-Code (ISO 1769)**	**Length mm (± 10 mm)**	**Error limit ± ml**	**Error limit ± ml**
0.5	2 x black	300	0.005	0.007
1	blue	300	0.008	0.010
2	orange	330	0.010	0.015
2.5	–	330	0.010	–
3	black	330	0.010	0.015
4	2 x red	400	0.015	–
5	white	400	0.015	0.025
6	2 x orange	400	0.015	–
7	2 x green	400	0.015	–
8	blue	440	0.02	–
9	black	440	0.02	–
10	red	440	0.02	0.03
15	green	510	0.03	0.04
20	yellow	510	0.03	0.04
25	blue	520	0.03	0.04
30	black	520	0.03	–
40	white	540	0.05	–
50	red	540	0.05	0.07
100	yellow	585 (± 15 mm)	0.08	0.12

BRAND bulb pipettes provide the highest accuracy.
Strict statistical quality controls assure maintenance of these high standards.

All BLAUBRAND® bulb pipettes are supplied with a batch number and an accompanying batch certificate in the original packaging.
On request, they are also available with an individual certificate, USP individual certificate or DKD calibration certificate.
(For information about batch, individual or DKD certificates see pages 129 and 284.)

Bulb pipettes, 1 mark

BLAUBRAND®, class AS, conformity certified

AR-Glas®. DIN EN ISO 648.
Calibrated to deliver (TD, Ex).
Incl. one batch certificate
0.5 to 2 ml: Pack of 12;
2.5 to 100 ml: Pack of 6.

NEW!

Capacity ml	Cat. No.
0.5	297 01
1	297 02
2	297 03
2.5	297 04
3	297 05
4	297 06
5	297 07
6	297 08
7	297 09
8	297 10
9	297 11
10	297 12
15	297 13
20	297 14
25	297 15
30	297 16
40	297 17
50	297 18
100	297 19

NEW!

Bulb pipettes, 1 mark

BLAUBRAND® ETERNA, class AS, conformity certified

AR-Glas®. DIN EN ISO 648.
Calibrated to deliver (TD, Ex).
Incl. one batch certificate
1 and 2 ml: Pack of 12;
5 to 25 ml: Pack of 6.

Capacity ml	Cat. No.
1	305 02
2	305 03
5	305 07
10	305 12
20	305 14
25	305 15
50	305 18

NEW!

Bulb pipettes, 2 marks

BLAUBRAND®, class AS, conformity certified

AR-Glas®. DIN EN ISO 648.
Calibrated to deliver (TD, Ex).
Incl. one batch certificate
0.5 to 2 ml: Pack of 12;
3 to 50 ml: Pack of 6.

Capacity ml	Cat. No.
0.5	297 21
1	297 22
2	297 23
3	297 25
5	297 27
10	297 32
15	297 33
20	297 34
25	297 35
50	297 38

Capacity ml	Cat. No.
0.5	295 01
1	295 02
2	295 03
3	295 05
5	295 07
10	295 12
15	295 13
20	295 14
25	295 15
50	295 18
100	295 19

Bulb pipettes, 1 mark

SILBERBRAND ETERNA, class B

AR-Glas®. DIN EN ISO 648.
Calibrated to deliver (TD, Ex).
0.5 to 2 ml: Pack of 12;
3 to 100 ml: Pack of 6.

NEW!

Capacity ml	Error limit ± ml	Cat. No.
1	0.015	314 02
2	0.02	314 03
5	0.03	314 07
10	0.04	314 12
20	0.06	314 14
25	0.06	314 15

Bulb pipettes, piston type

SILBERBRAND

AR-Glas®. Calibrated to deliver (TD, Ex).
Integrated piston pipetting aid with retaining spring. Pack of 1.

Bulb pipettes, 1 mark

PLASTIBRAND®

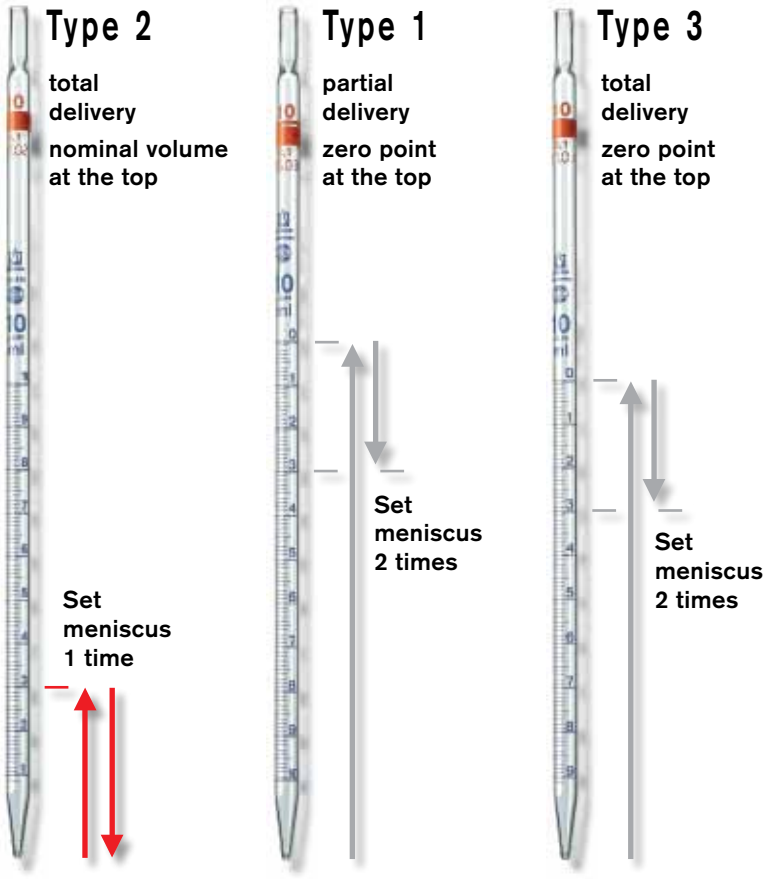
PP. High clarity. Calibrated to deliver (TD, Ex). Resistant to breakage. Exposure to temperatures up to 60 °C will not cause permanent exceeding of error limits!
Cleaning temperature below 60 °C is recommended to preserve marks and inscriptions.
1 and 2 ml: Pack of 12; 5 to 50 ml: Pack of 6.

Capacity ml	Error limit ± ml	Length mm ± 10 mm	Cat. No.
1	0.02	300	300 02
2	0.02	300	300 03
5	0.03	300	300 07
10	0.04	440	300 12
25	0.06	450	300 15
50	0.1	460	300 18

Graduated Pipettes

In the new DIN EN ISO 835, the waiting time for graduated pipettes was reduced from 15 to 5 seconds and the type 2, total delivery, nominal volume at top, was included.
We recommend the graduated pipette type 2 as with these pipettes the meniscus needs to be set only once to achieve exact pipetting.
In contrast, with types 1 and 3, there is a risk of over-dispensing while setting the meniscus the second time. In such a case, the sample would have to be prepared again.

BLAUBRAND® graduated Pipettes, class AS



Precision pipette tip

Optimized flow geometry in the tip ensures reliable liquid dispensing from bulb and graduated pipettes.
The mechanical resilience of the tip and its fire-polished edges ensure a long service life.

Technical data, available sizes

Graduated pipettes are calibrated to contain (TC, In) respectively to deliver (TD, Ex).

				BLAUBRAND® waiting time 5 s		SILBERBRAND no waiting time	
Capacity ml	**Subdiv. ml**	**Color-Code (ISO 1769)**	**Length mm (± 10 mm)**	**Calibr.**	**EL* ± ml**	**Calibr.**	**EL* ± ml**
0.1	0.001	2 x green	360	In	0.001	–	–
0.2	0.002	2 x white	360	In	0.002	–	–
0.5	0.01	2 x yellow	360	Ex	0.006	Ex	0.008
1	0.01	yellow	360	Ex	0.007	Ex	0.010
1	0.1	red	360	Ex	0.007	Ex	0.010
2	0.01	2 x white	360	Ex	0.010	Ex	0.015
2	0.02	black	360	Ex	0.010	Ex	0.015
2	0.1	green	360	Ex	0.010	Ex	0.015
5	0.05	red	360	Ex	0.030	Ex	0.05
5	0.1	blue	360	Ex	0.030	Ex	0.05
10	0.1	orange	360	Ex	0.05	Ex	0.08
20	0.1	2 x yellow	360	Ex	0.1	Ex	0.15
25	0.1	white	450	Ex	0.1	Ex	0.15
50	0.5	–	450	Ex	0.2	–	–

* EL: Error limit

DIN EN ISO 835

In the new DIN EN ISO 835, the waiting time for graduated pipettes of class AS was reduced from 15 to 5 seconds.

All BLAUBRAND® graduated pipettes are supplied with a batch number and an accompanying batch certificate in the original packaging.
On request, they are also available with an individual certificate, USP individual certificate or DKD calibration certificate. (For information about batch, individual or DKD certificates see pages 129 and 284.)

Graduated pipettes, Type 2, total delivery

NEW!

BLAUBRAND®, class AS, nominal volume at the top, conformity certified

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex). Incl. one batch certificate. Pack of 12; (20, 25, 50 ml: Pack of 6).

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5	0.01	no	278 16
1	0.01	no	278 17
1	0.01	yes	278 27
1	0.1	no	278 18
2	0.02	no	278 19
2	0.02	yes	278 28
2	0.1	no	278 20
5	0.05	yes	278 21
5	0.1	yes	278 22
10	0.1	yes	278 23
20	0.1	yes	278 24
25	0.1	yes	278 25
50*	0.5	yes	278 26

* in addition to the ISO range

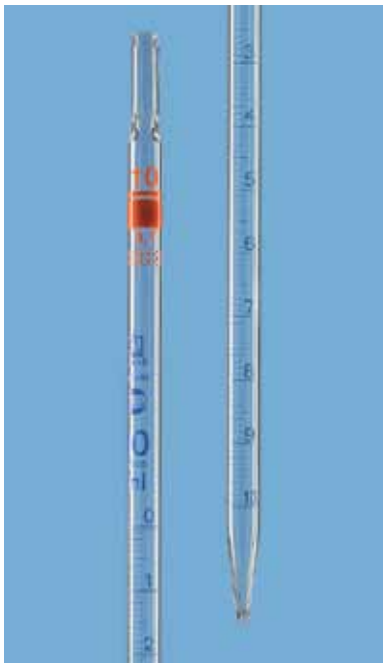
Graduated pipettes, Type 2, total delivery

NEW!

BLAUBRAND® ETERNA, class AS, nominal volume at the top, conformity certified

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex). Incl. one batch certificate. Pack of 12 (20, 25, 50 ml: Pack of 6).

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5	0.01	no	278 36
1	0.01	no	278 37
1	0.01	yes	278 47
2	0.02	no	278 39
2	0.02	yes	278 48
5	0.05	yes	278 41
5	0.1	yes	278 42
10	0.1	yes	278 43
20	0.1	yes	278 44
25	0.1	yes	278 45



Graduated pipettes, Type 1, partial delivery

BLAUBRAND®, class AS, zero point at the top, conformity certified

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex).
Incl. one batch certificate. Pack of 12 (25 ml: Pack of 6).

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5	0.01	no	277 21
1	0.01	no	277 22
2*	0.01	no	277 24
2	0.02	no	277 25
5	0.05	yes	277 27
10	0.1	yes	277 29
25	0.1	yes	277 31

* in addition to the ISO range, not conformity certified

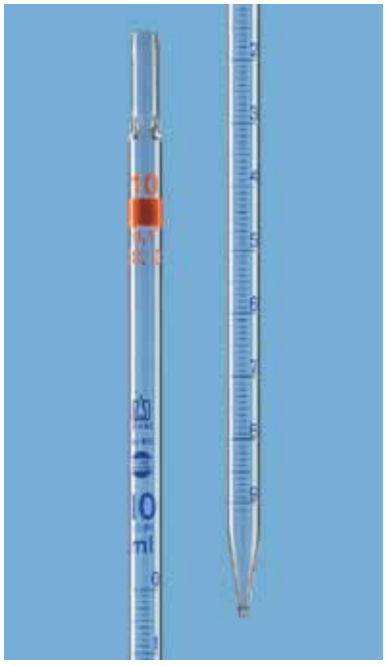
Graduated pipettes, Type 1, partial delivery

BLAUBRAND® ETERNA, class AS, zero point at the top, conformity certified

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex). incl. one batch certificate.
Pack of 12 (25 ml: Pack of 6).

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5	0.01	no	277 48
1	0.01	no	277 49
2*	0.01	no	277 51
2	0.02	no	277 52
5	0.05	yes	277 54
10	0.1	yes	277 56
25	0.1	yes	277 58

* in addition to the ISO range, not conformity certified



Graduated pipettes, Type 3, total delivery

BLAUBRAND®, class AS, zero point at the top, conformity certified

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex). Incl. one batch certificate.
0.5 to 10 ml: Pack of 12; 20 to 50 ml: Pack of 6.

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5	0.01	no	277 05
1	0.01	no	277 06
1	0.01	yes	273 06
1	0.1	no	277 07
2**	0.01	no	277 08
2	0.02	no	277 09
2	0.02	yes	273 09
2	0.1	no	277 10
5	0.05	yes	277 11
5	0.1	yes	277 12
10	0.1	yes	277 13
20	0.1	yes	277 14
25	0.1	yes	277 15
50*	0.5	yes	277 16

* in addition to the ISO range ** in addition to the ISO range, not conformity certified

Graduated pipettes, Type 3, total delivery

BLAUBRAND® ETERNA, class AS, zero point at the top, conformity certified

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex). Incl. one batch certificate.
0.5 to 10 ml: Pack of 12; 20 and 25 ml: Pack of 6.

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5	0.01	no	284 05
1	0.01	no	284 06
1	0.01	yes	273 16
2	0.02	no	284 09
2	0.02	yes	273 19
5	0.05	yes	284 11
5	0.1	yes	284 12
10	0.1	yes	284 13
20	0.1	yes	284 14
25	0.1	yes	284 15

Cotton cord

100% cotton wool, degreased, approx.
13 g/10 m. Pack of 1 kg.

Cat. No.	282 05

The use of cotton plugs

Cotton plugs may prolong delivery time and may therefore influence the accuracy of measurement. In tests using BRAND pipettes that have had cotton plugs inserted by a cotton plugging machine, the results were within the indicated error limits.

Graduated pipettes, Type 3, total delivery

SILBERBRAND ETERNA, class B, zero point at the top

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex).
0.5 to 10 ml: Pack of 12; 20 and 25 ml: Pack of 6.

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.5*	0.01	no	270 69
1	0.01	no	270 70
1	0.01	yes	272 06
1*	0.1	no	270 71
2*	0.01	no	270 72
2	0.02	yes	272 09
2	0.02	no	270 73
2	0.1	no	270 74
5	0.05	yes	270 75
5*	0.1	yes	270 76
10	0.1	yes	270 77
20*	0.1	yes	270 78
25*	0.1	yes	270 79

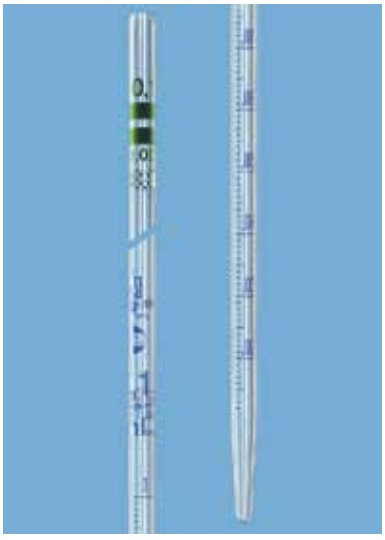
* in addition to the ISO range

Graduated pipettes, calibrated to contain

BLAUBRAND®, class A, conformity certified

AR-Glas®. Error limits and subdivisions according to DIN 12689. Length 360 mm.
Calibrated to contain (TC, In). Incl. one batch certificate. Pack of 12.

Capacity ml	Subdivision ml	Cotton plug upper end	Cat. No.
0.1	0.001	no	277 02
0.2	0.002	no	277 04

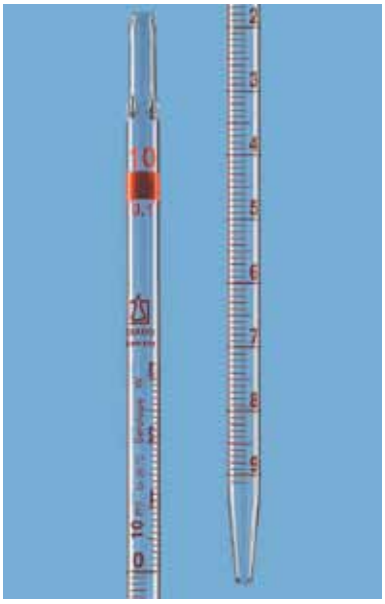


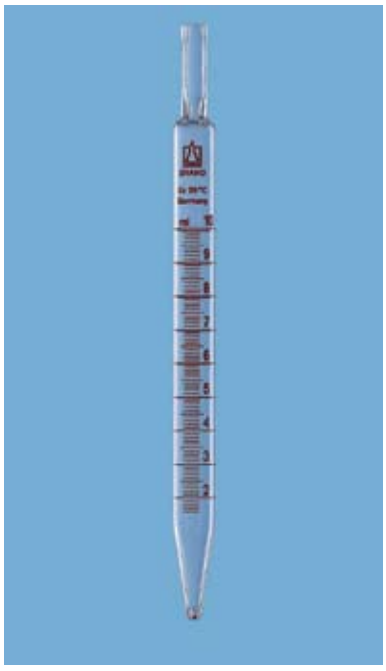
Graduated pipettes, serological

Large tip diameter, total delivery

AR-Glas®. Calibrated to deliver (TD, Ex). Tip Ø: (1 and 2 ml); approx. 2 mm, (5, 10 and 25 ml); approx. 3 mm. Graduations and inscriptions in ETERNA amber stain.
Short graduation marks. 1 to 10 ml: Pack of 12; 25 ml: Pack of 6.

Capacity ml	Error limit ± ml	Subdivision ml	negative range ml	Cotton plug upper end	Cat. No.
1	0.02	0.01	-0.2	yes	271 07
2	0.04	0.02	-0.4	yes	271 09
5	0.1	0.1	-2	yes	271 12
10	0.2	0.1	-3	yes	271 13
25	0.4	0.1	-5	yes	271 15





Graduated pipettes, tissue culture

Short type, total delivery

AR-Glas®. Calibrated to deliver (TD, Ex). Graduations and inscriptions in ETERNA amber stain. Ring marks at major graduations. Length 230 mm.
1 to 10 ml: Pack of 12; 25 ml: Pack of 6.

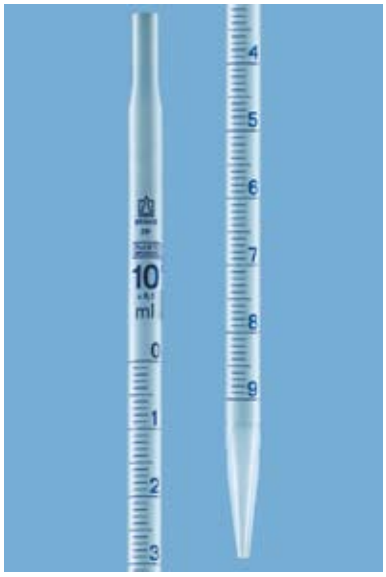
Capacity ml	Error limit ± ml	Subdivision ml	Cotton plug upper end	Cat. No.
1	0.02	0.1	yes	271 60
2	0.04	0.1	yes	271 64
5	0.1	0.1	yes	271 66
10	0.2	0.1	yes	271 67
25	0.4	0.2	yes	271 79

Graduated pipettes, piston type

SILBERBRAND, total delivery

AR-Glas®. Calibrated to deliver (TD, Ex). Integrated piston pipetting aid with retaining spring. Pack of 1.

Capacity ml	Error limit ± ml	Subdivision ml	Cat. No.
1	0.01	0.01	311 06
2	0.02	0.02	311 09
5	0.05	0.05	311 11
10	0.1	0.1	311 13
25	0.2	0.1	311 15



Graduated pipettes, made of plastic

PLASTIBRAND®

PP. High clarity. Calibrated to deliver (TD, Ex). Resistant to breakage. Suction tube outer Ø max. 8 mm. Exposure to temperatures up to 60 °C will not cause permanent exceeding of error limits! Cleaning temperature below 60 °C is recommended to preserve marks and inscriptions. Pack of 12.

Capacity ml	Error limit ± ml	Subdivision ml	Length mm ± 10 mm	Cat. No.
1	0.02	0.1	300	276 07
2	0.02	0.1	300	276 10
5	0.05	0.1	330	276 12
10*	0.1	0.1	330	276 13
10	0.1	0.1	320	276 14

* Suction tube outer Ø 10 mm

Volumetric Flasks

BRAND volumetric flasks provide the highest accuracy. Strict statistical quality controls ensure maintenance of these high standards.
Volumetric flasks are indispensable for preparing dilutions and standard solutions. Standard volumetric flasks are supplied with a square-grip PP stopper with a dripping tip. These stoppers reduce the danger of breakage if a flask tips over, and help to prevent it from rolling off the workbench.

All BLAUBRAND® volumetric flasks are supplied with a batch number and an accompanying batch certificate in the original packaging.
On request, they are available also with an individual certificate, or DKD calibration certificate. With the exception of the wide neck design, the graduated flasks are also available with USP individual and batch certificates.

BLAUBRAND® Volumetric Flasks – Durable Quality

Specifications, available sizes

Volumetric flasks are always calibrated to contain (TC, In).

Volumetric flasks, trapezoidal

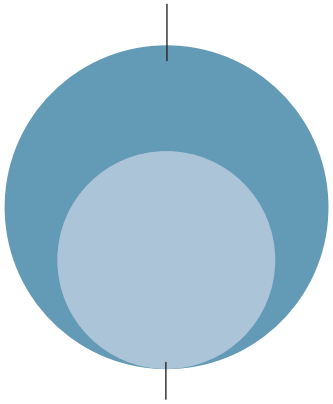
Capacity ml	Neck inner Ø mm	Neck size	BLAUBRAND® Error limit ± ml
1	7 ± 1	7/16	0.025
2	7 ± 1	7/16	0.025
5	7 ± 1	7/16	0.025
10 W	9 ± 1	10/19	0.04
20	9 ± 1	10/19	0.04
25	9 ± 1	10/19	0.04
50	11 ± 1	12/21	0.06

W = Wide neck

Trapezoidal volumetric flasks

Small capacity standard volumetric flasks can tip over more easily due to their higher center of gravity.
Trapezoidal measuring flasks have a much larger base area which greatly improves stability!

Twice (!) the base area compared to standard volumetric flasks of the same capacity



Volumetric flask, standard type

Volumetric flasks, standard type

Capacity ml	Neck inner Ø mm		Neck size	BLAUBRAND® Error limit ± ml	SILBERBRAND Error limit ± ml
5 W	9	± 1	10/19	0.04	–
10 W	9	± 1	10/19	0.04	0.06
20	9	± 1	10/19	0.04	0.06
20 W	11	± 1	12/21	0.06	–
25	9	± 1	10/19	0.04	0.06
25 W	11	± 1	12/21	0.06	–
50	11	± 1	12/21	0.06	0.09
50 W	13	± 1	14/23	0.10	–
100	13	± 1	12/21	0.10	0.15
100	13	± 1	14/23	0.10	–
200	15.5	± 1.5	14/23	0.15	0.25
250	15.5	± 1.5	14/23	0.15	0.25
500	19	± 2	19/26	0.25	0.40
1000	23	± 2	24/29	0.40	0.60
1000 W	27.5	± 2.5	29/32	0.60	–
2000	27.5	± 2.5	29/32	0.60	0.90
5000	38	± 3	34/35	1.2	1.8
10000	48	± 4	45/40	2.0	–

W = Wide neck

Volumetric flasks, trapezoidal

BLAUBRAND®, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one batch certificate. Pack of 2.

Capacity ml	Error limit ± ml	Neck size	with PP stopper Cat. No.	with glass stopper Cat. No.
1	0.025	7/16	364 01	364 12
2	0.025	7/16	364 02	364 13
5	0.025	7/16	364 03	364 14
10 W	0.04	10/19	364 04	364 15
20	0.04	10/19	364 06	364 17
25	0.04	10/19	364 07	364 18
50	0.06	12/21	364 08	364 19

W = Wide neck

Volumetric flasks

BLAUBRAND®, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one batch certificate. 5 to 500 ml: Pack of 2; 1000 to 10000 ml: Pack of 1.

Capacity ml	Error limit ± ml	Neck size	with PP stopper Cat. No.	with glass stopper Cat. No.
5 W	0.04	10/19	372 38	372 56
10 W	0.04	10/19	372 43	372 67
20	0.04	10/19	372 46	372 57
20 W	0.06	12/21	372 45	372 68
25	0.04	10/19	372 47	372 58
25 W	0.06	12/21	372 93	372 94
50	0.06	12/21	372 48	372 59
50 W	0.10	14/23	372 90	372 88
100	0.10	12/21	372 49	372 60
100	0.10	14/23	372 91	372 89
200	0.15	14/23	372 50	372 61
250	0.15	14/23	372 51	372 62
500	0.25	19/26	372 52	372 63
1000	0.4	24/29	372 53	372 64
1000 W	0.6	29/32	372 34	-
2000	0.6	29/32	372 54	372 65
5000	1.2	34/35	372 55	372 66
10000*	2.0	45/40	372 36	-

W = Wide neck * in addition to the DIN range

BLAUBRAND®, USP, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one USP batch certificate. 5 to 500 ml: Pack of 2; 1000 and 2000 ml: Pack of 1.

Capacity ml	Error limit ± ml	Neck inner Ø mm	Neck size	with PP stopper Cat. No.
5	0.020	7 ± 1	10/19*	369 38
10	0.020	7 ± 1	10/19*	369 43
25	0.03	9 ± 1	10/19	369 47
50	0.05	11 ± 1	12/21	369 48
100	0.08	13 ± 1	14/23	369 49
200	0.10	15.5 ± 1.5	14/23	369 50
250	0.12	15.5 ± 1.5	14/23	369 51
500	0.15	19 ± 2	19/26	369 52
1000	0.30	23 ± 2	24/29	369 53
2000	0.5	27.5 ± 2.5	29/32	369 54

* Neck/ground socket connection enlarged

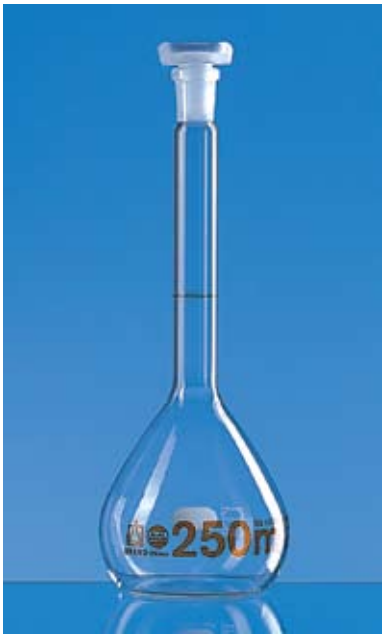
Volumetric flasks

BLAUBRAND® ETERNA, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one batch certificate.
5 to 500 ml: Pack of 2; 1000 and 2000 ml: Pack of 1.

Capacity ml	Error limit ± ml	Neck size	with PP stopper Cat. No.
5 W	0.04	10/19	368 38
10 W	0.04	10/19	368 43
20	0.04	10/19	368 45
20 W	0.06	12/21	368 46
25	0.04	10/19	368 41
25 W	0.06	12/21	368 42
50	0.06	12/21	368 47
50 W	0.10	14/23	368 48
100	0.10	14/23	368 49
200	0.15	14/23	368 50
250	0.15	14/23	368 51
500	0.25	19/26	368 52
1000	0.4	24/29	368 53
2000	0.6	29/32	368 54

W = Wide neck



NEW!

Volumetric flasks, PUR Plastic coated

BLAUBRAND® PURprotect, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one batch certificate.
50 to 500 ml: Pack of 2; 1000 ml: Pack of 1. **Delivery date to be agreed upon.**

Capacity ml	Error limit ± ml	Neck size	with PP stopper Cat. No.
50 W	0.10	14/23	365 48
100	0.10	14/23	365 49
200	0.15	14/23	365 50
250	0.15	14/23	365 51
500	0.25	19/26	365 52
1000	0.4	24/29	365 53

W = Wide neck

Further sizes on request.

Synthetic coating for better protection

The PUR coating envelops the volumetric flasks like a protection skin.
In the event of breakage, the safety coating helps contain the glass fragments.
Compared to uncoated glass flasks the electrostatic charge is not increased.
The light blue coating facilitates optical distinction. The maximum operating temperature at dry heat is 135 °C (exposure time < 30 min).
Frequent autoclaving at 121 °C reduces splintering protection.
Cleaning up to max. 95 °C.

Volumetric flasks with 3 marks, DKD-calibrated

NEW!

BLAUBRAND®, class A, conformity certified

DURAN®, DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. DKD-certificate.
The volumetric flask with 3 marks is used to check the functioning of a dispenser. The mark in the middle shows the nominal volume, the upper and lower marks show the error limits as specified in the table below. If the error limit is exceeded even with repeated measurements, the dispenser is defective. The DKD-calibrated volumetric flask does not replace the gravimetric test of the monitoring of measuring instruments according to ISO 8655. Pack of 1. **Delivery date to be agreed upon.**

Capacity ml	upper/lower mark ± ml	Neck inner Ø mm	Neck size	with PP stopper Cat. No.
10	0.070	7 ± 1	10/19*	382 04
25	0.175	9 ± 1	10/19	382 06
50	0.350	11 ± 1	12/21	382 08
100	0.700	13 ± 1	14/23	382 10

* enlarged ground joint

Further sizes on request.

Volumetric flasks, amber glass

BLAUBRAND®, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In).
Interchangeable PP or amber glass stopper. Incl. one batch certificate.
5 to 500 ml: Pack of 2; 1000 ml: Pack of 1.

Capacity ml	Error limit ± ml	Neck size	with PP stopper Cat. No.	with glass stopper Cat. No.
5 W	0.04	10/19	374 01	374 38
10 W	0.04	10/19	374 02	374 43
20	0.04	10/19	374 03	374 46
25	0.04	10/19	374 04	374 47
50	0.06	12/21	374 05	374 48
50 W	0.10	14/23	374 06	374 45
100	0.10	14/23	374 07	374 49
200	0.15	14/23	374 08	374 50
250	0.15	14/23	374 09	374 51
500	0.25	19/26	374 10	374 52
1000	0.4	24/29	374 11	374 53

W = Wide neck

Volumetric flasks, beaded rim

BLAUBRAND®, class A, conformity certified

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one batch certificate.
5 to 500 ml: Pack of 2; 1000 ml: Pack of 1.

Capacity ml	Error limit ± ml	Cat. No.
10 W	0.04	370 45
20	0.04	370 46
25	0.04	370 47
50	0.06	370 48
100	0.10	370 49
200	0.15	370 50
250	0.15	370 51
500	0.25	370 52
1000	0.4	370 53

W = Wide neck

Volumetric flasks

SILBERBRAND, class B

DURAN®. DIN EN ISO 1042. Calibrated to contain (TC, In).
5 to 500 ml: pack of 2; 1000 to 5000 ml: pack of 1.

Capacity ml	Error limit ± ml	Neck size	with PP stopper Cat. No.
10 W	0.06	10/19	367 43
20	0.06	10/19	367 46
25	0.06	10/19	367 47
50	0.09	12/21	367 48
100	0.15	12/21	367 49
200	0.25	14/23	367 50
250	0.25	14/23	367 51
500	0.4	19/26	367 52
1000	0.6	24/29	367 53
2000	0.9	29/32	367 54
5000	1.8	34/35	367 55

W = Wide neck

Volumetric flask for oil content determination

SILBERBRAND

Borosilicate glass 3.3. DIN 51368. Interchangeable hollow glass stopper size 19/26. Calibrated to contain (TC, In). For determination of oil content in aqueous oil emulsions (e.g. drilling oil). Pack of 1.

Capacity ml	Subdivision ml	Cat. No.
100 ml (Error limit ± 0.2 ml)	0 - 5 ml (Error limit ± 0.10 ml); 5 - 30 ml (Error limit ± 0.5 ml)	3655 38

Volumetric flasks for sugar analysis

SILBERBRAND

Borosilicate glass 3.3. Error limits according to class B. Calibrated to contain (TC, In). For Kohlrausch sugar analysis. Pack of 2.

Capacity ml	Error limit ± ml	Cat. No.
100	0.20	4020 38
200	0.30	4020 46

Volumetric flasks with screw cap, PFA PLASTIBRAND®

Error limits according to class A, DIN EN ISO 1042. Calibrated to contain (TC, In). Incl. one batch certificate. Autoclavable, easy to clean. PFA screw cap with molded sealing ring. Exposure to temperatures up to 121 °C (autoclaving) will not cause permanently exceeded error limits! Cleaning up to max. 60 °C is recommended to preserve marks and inscriptions. Pack of 1.

Capacity ml	Error limit ± ml	Height* mm	Thread	Cat. No.
10 W	0.04	90	GL 18	362 08
25	0.04	108	GL 18	362 20
50	0.06	143	GL 18	362 28
100	0.10	166	GL 18	362 38
250	0.15	222	GL 25	362 48
500	0.25	262	GL 25	362 54

W = Wide neck * without screw cap

Thread	Cat. No.
GL 18	1292 50
GL 25	1292 52

Replacement screw caps for volumetric flasks PFA

PFA. Pack of 1.

Volumetric flasks, PMP, transparent

PLASTIBRAND®

With PP stopper. Error limits according to class A respectively B, DIN EN ISO 1042. Class A incl. one batch certificate. Calibrated to contain (TC, In). Exposure to temperatures up to 121 °C (autoclaving) will not cause permanently exceeded error limits! Cleaning up to max. 60 °C is recommended to preserve marks and inscriptions. Pack of 1.

Capacity ml	Error limit 'A' ± ml	Error limit 'B' ± ml	Height* mm	Neck size	Cat. No. Error limit 'A'	Cat. No. Error limit 'B'
10 W	0.04	0.08	90	10/19	361 70	361 08
25	0.04	0.08	108	10/19	361 72	361 20
50	0.06	0.12	146	12/21	361 74	361 28
100	0.10	0.20	173	14/23	361 76	361 38
250	0.15	0.30	225	19/26	361 78	361 48
500	0.25	0.5	258	19/26	361 80	361 54
1000	0.4	0.8	298	24/29	361 82	361 62

W = Wide neck * without stopper

Volumetric flasks, PP, high clarity

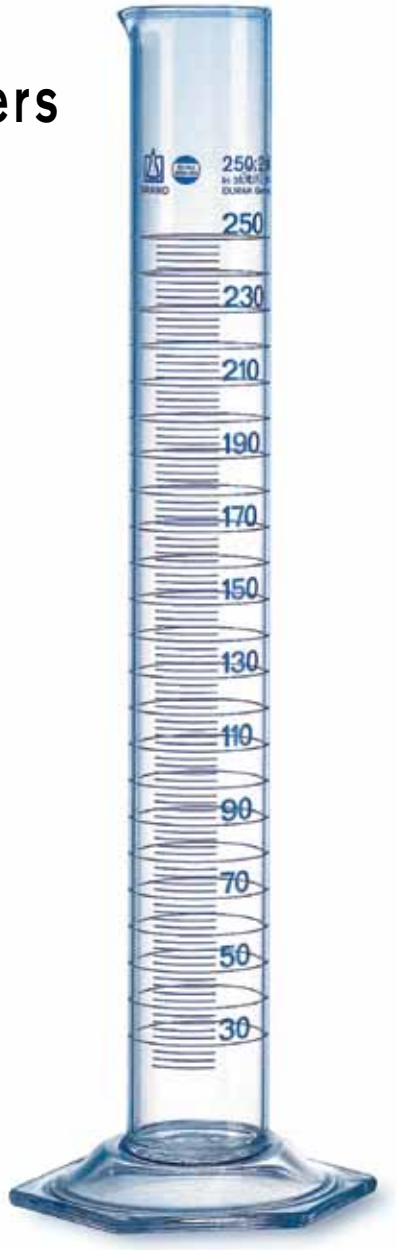
PLASTIBRAND®

With PP stopper. Error limits according to class B, DIN EN ISO 1042. Calibrated to contain (TC, In). Exposure to temperatures up to 60 °C will not cause permanently exceeded error limits! Cleaning up to max. 60 °C is recommended to preserve marks and inscriptions. Pack of 1.

Capacity ml	Error limit ± ml	Height* mm	Neck size	Cat. No.
10 W	0.08	90	10/19	360 08
25	0.08	108	10/19	360 20
50	0.12	146	12/21	360 28
100	0.20	173	14/23	360 38
250	0.30	225	19/26	360 48
500	0.5	258	19/26	360 54
1000	0.8	298	24/29	360 62

W = Wide neck * without stopper

Graduated Cylinders



BRAND graduated and mixing cylinders provide the highest accuracy. Strict statistical quality controls ensure maintenance of these high standards.

All BLAUBRAND® graduated cylinders are supplied with a batch number and an accompanying batch certificate in the original packaging. On request, they are also available with an individual certificate, USP individual certificate or DKD calibration certificate.

Graduation and Reading

BLAUBRAND®. Ring marks at major graduations. Reading at lowest point of meniscus.

SILBERBRAND. Short graduation marks. Reading at lowest point of meniscus.

Specifications, available sizes

Graduated and mixing cylinders are always calibrated to contain (TC, In).

		BLAUBRAND® tall form	SILBERBRAND tall form	SILBERBRAND low form
Capacity ml	**Subdivision ml**	**Error limit ± ml**	**Error limit ± ml**	**Error limit ± ml**
5	0.1	0.05	0.08	–
10	0.2	0.10	0.15	0.3
25	0.5	0.25	0.4	0.5
50	1	0.5	0.8	1
100	1	0.5	0.8	1
250	2	1.0	1.5	2
500	5	2.5	4	5
1000	10	5	8	10
2000	20	10	15	20

Our PLASTIBRAND® class A$^+$ measuring cylinders made of PMP (conformity certified) are low-price high-quality alternative to glass cylinders (see page 149-150).

Graduated cylinders, tall form

BLAUBRAND® or BLAUBRAND® ETERNA, class A, conformity certified, ring marks at major graduations

DURAN®. DIN EN ISO 4788. Calibrated to contain (TC, In). Incl. one batch certificate. With spout and hexagonal base. 5 to 500 ml: Pack of 2; 1000 and 2000 ml: Pack of 1.

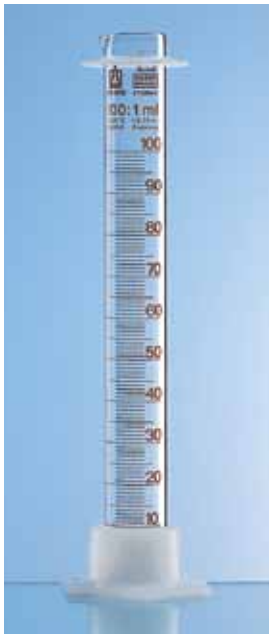
Capacity ml	Subdivision ml	Height mm	BLAUBRAND® Cat. No.	BLAUBRAND® ETERNA Cat. No.
5	0.1	115	321 05	327 05
10	0.2	140	321 08	327 08
25	0.5	170	321 20	327 20
50	1	200	321 28	327 28
100	1	260	321 38	327 38
250	2	335	321 48	327 48
500	5	365	321 54	327 54
1000	10	465	321 62	327 62
2000	20	505	321 64	327 64

Graduated cylinders, tall form

SILBERBRAND or SILBERBRAND ETERNA, class B, short graduation marks

DURAN®. DIN EN ISO 4788. Calibrated to contain (TC, In). With spout and hexagonal base. 5 to 500 ml: Pack of 2; 1000 and 2000 ml: Pack of 1.

Capacity ml	Subdivision ml	Height mm	SILBERBRAND Cat. No.	SILBERBRAND ETERNA Cat. No.
5	0.1	115	-	319 05
10	0.2	140	317 08	319 08
25	0.5	170	317 20	319 20
50	1	200	317 28	319 28
100	1	260	317 38	319 38
250	2	335	317 48	319 48
500	5	365	317 54	319 54
1000	10	465	317 62	319 62
2000	20	505	317 64	319 64



Graduated cylinders, tall form

SILBERBRAND ETERNA, class B, short graduation marks

DURAN®. DIN EN ISO 4788. Calibrated to contain (TC, In). With spout. With detachable hexagonal base and protective collar of PP (not autoclavable).
10 to 500 ml: Pack of 2; 1000 ml: Pack of 1.

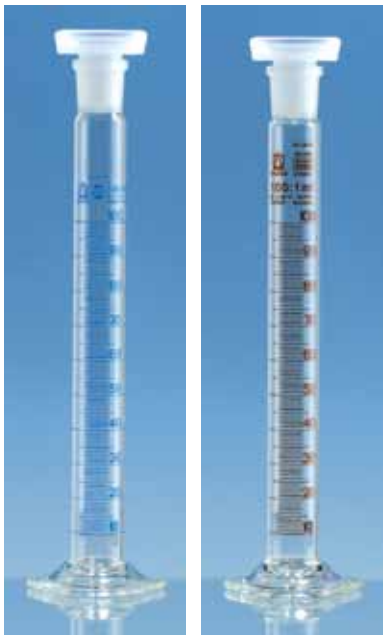
Capacity ml	Subdivision ml	Height mm	Cat. No.
10	0.2	135	319 09
25	0.5	170	319 21
50	1	190	319 29
100	1	260	319 39
250	2	335	319 49
500	5	370	319 55
1000	10	450	319 63

Graduated cylinders, low form

SILBERBRAND ETERNA, class B, short graduation marks

DURAN®. DIN EN ISO 4788. Calibrated to contain (TC, In). With spout and hexagonal base. Pack of 2; 1000 ml and 2000 ml: Pack of 1.

Capacity ml	Subdivision ml	Height mm	Cat. No.
10	1	90	420 08
25	1	115	420 20
50	2	145	420 28
100	2	165	420 38
250	5	195	420 48
500	10	250	420 54
1000	20	285	420 62
2000	50	340	420 64



Mixing cylinders

BLAUBRAND®, class A, conformity certified, or SILBERBRAND ETERNA, class B

DURAN®. DIN EN ISO 4788. Calibrated to contain (TC, In). BLAUBRAND® mixing cylinders incl. one batch certificate. With PP stopper and hexagonal base.
10 to 500 ml: Pack of 2; 1000 ml: Pack of 1.

Capacity ml	Subdivision ml	Neck size	Height** mm	BLAUBRAND® Cat. No.	SILBERBRAND ETERNA Cat. No.
10	0.2	10/19	160	324 08	339 08
25	0.5	14/23	190	324 20	339 20
50	1	19/26	220	324 28	339 28
100	1	24/29	285	324 38	339 38
250	2	29/32	350	324 48	339 48
500*	5	34/35	395	324 54	339 54
1000*	10	45/40	500	324 62	339 62

* with octagonal stopper, PE ** without stopper

Dispensers, tilt measure

Bottletop dispensing head

Dispensing head DURAN®. Calibrated to deliver (TD, Ex). Inscriptions in green enamel. The automatic dispenser is particularly well-suited for dispensing suspensions.
Complete with reservoir bottle, borosilicate glass 4.1, capacity 1000 ml, neck size 29/32.
Pack of 1.

Capacity ml	Error limit ± ml	Height incl. bottle mm	Dispensing head Cat. No.	Complete with bottle Cat. No.
5	1.0	270	430 55	430 05
10	1.0	270	430 58	430 08
20	2.0	280	430 66	430 16
25	2.5	280	430 70	430 20
50	5	280	430 78	430 28
100	10	290	430 88	430 38

Accessories for dispensers, tilt measure

Joint clip

Stainless-steel. Neck size 29/32.
Pack of 1.

Cat. No.	556 18

Ground joint sleeve

PTFE. Neck size 29/32.
Pack of 10.

Cat. No.	514 22

Reservoir bottle

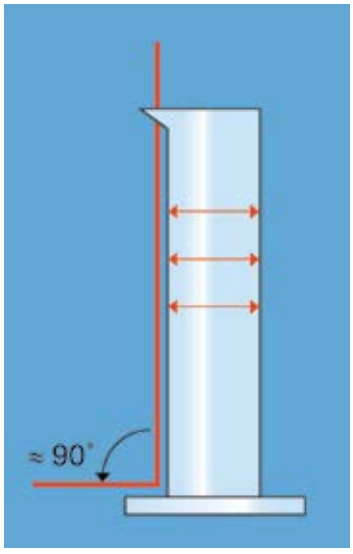
Borosilicate glass 4.1.
Capacity 1000 ml. Neck size 29/32.
Pack of 1.

Description	Cat. No.
Borosilicate glass 4.1	1269 63

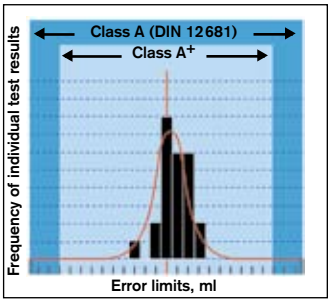
Plastic Graduated Cylinders

PLASTIBRAND® graduated cylinders are made of high-quality plastics which provide excellent chemical resistance. The nearly perfect cylindrical design allows equal graduation marks.

- Strengthened rim increases overall dimensional stability
- Functional spout minimizes spills
- Hexagonal base with knobs for increased stability
- Easy-to-read graduations
- Extremely durable



PLASTIBRAND®
Graduated cylinders, class A+



Class A+ compared to Class A

PLASTIBRAND® class A+ graduated cylinders are specified with 20% tighter error limits than required by DIN 12681 (shown above). PLASTIBRAND® class A+ error limits are maintained after 20 washing and 10 sterilization cycles at 121 °C. (DIN 12681 requires only 10 washing and 3 sterilization cycles.)

Graduated cylinders A+, PMP

PLASTIBRAND®, class A+, conformity certified, tall form, with blue printed scale

PMP, transparent. DIN 12681 and ISO 6706. Calibrated to contain (TC, In). Incl. one batch certificate. A particularly high-quality printing ink is used in the PLASTIBRAND® graduated cylinders. Exposure to temperatures up to 121 °C (autoclaving) will not cause permanently exceeded error limits! Cleaning temperature below 60 °C is recommended to preserve marks and inscriptions.
10 to 500 ml: Pack of 2; 1000 and 2000 ml: Pack of 1.

Capacity ml	Subdivision ml	Error limit A+ ± ml	Error limit A ± ml	Height mm	Cat. No.
10	0.2	0.08	0.10	145	351 08
25	0.5	0.20	0.25	170	351 20
50	1	0.4	0.5	200	351 28
100	1	0.4	0.5	250	351 38
250	2	0.8	1.0	315	351 48
500	5	2.0	2.5	360	351 54
1000	10	4	5	440	351 62
2000	20	8	10	535	351 64

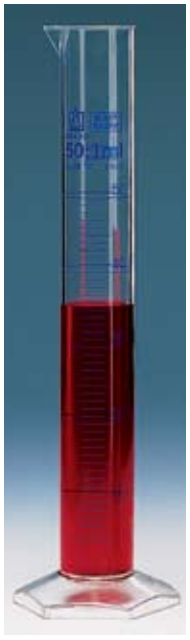
Error limit A+: Actual error limits of PMP graduated cylinders from BRAND
Error limit A: Nominal error limits according to DIN 12681

Graduated cylinders, PP

**tall form, PLASTIBRAND®, class B,
with blue printed scale or embossed scale**

PP, high clarity. DIN 12 681 and ISO 6706. Calibrated to contain (TC, In). Exposure to temperatures up to 80 °C will not cause permanently exceeded error limits! Cleaning temperature below 60 °C is recommended to preserve marks and inscriptions.

Capacity ml	Subdivision ml	Error limit ± ml	Height mm	Pack of	blue scale Cat. No.	embossed scale Cat. No.
10	0.2	0.20	145	10	348 08	350 08
25	0.5	0.5	170	10	348 20	350 20
50	1	1.0	200	10	348 28	350 28
100	1	1.0	250	10	348 38	350 38
250	2	2.0	315	5	348 48	350 48
500	5	5	360	5	348 54	350 54
1000	10	10	440	5	348 62	350 62
2000	20	20	535	1	348 64	350 64



Graduated cylinders, PMP

**tall form, PLASTIBRAND®, class B,
with blue printed scale or embossed scale**

PMP, transparent. DIN 12 681 and ISO 6706. Calibrated to contain (TC, In). Exposure to temperatures up to 121 °C (autoclaving) will not cause permanently exceeded error limits! Cleaning temperature below 60 °C is recommended to preserve marks and inscriptions. For autoclaving, we recommend the design with embossed scale.

Capacity ml	Subdivision ml	Error limit ± ml	Height mm	Pack of	blue scale Cat. No.	embossed scale Cat. No.
10	0.2	0.20	145	10	347 08	349 08
25	0.5	0.5	170	10	347 20	349 20
50	1	1.0	200	10	347 28	349 28
100	1	1.0	250	10	347 38	349 38
250	2	2.0	315	5	347 48	349 48
500	5	5	360	5	347 54	349 54
1000	10	10	440	5	347 62	349 62
2000	20	20	535	1	347 64	349 64

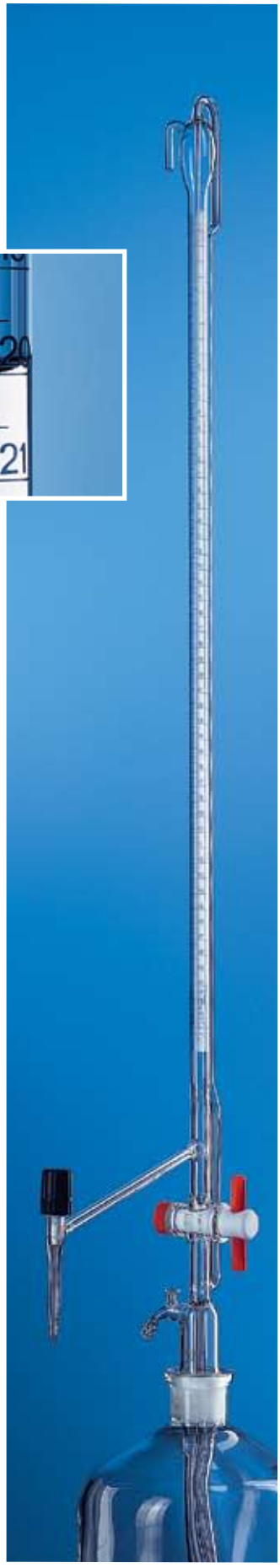
Graduated cylinders, PP and SAN

low form, PLASTIBRAND®, with embossed scale

PP, high clarity. SAN, transparent. Calibrated to contain (TC, In). Exposure to temperatures up to 80 °C will not cause permanently exceeded error limits!

Capacity ml	Subdivision ml	Error limit ± ml	Pack of	PP Best.-Nr.	SAN Best.-Nr.
25	0.5	0.5	10	416 20	415 20
50	1.0	1.0	10	416 28	415 28
100	2.0	2.0	10	416 38	415 38
250	5.0	5.0	5	416 48	415 48
500	10.0	10	5	416 54	415 54
1000	20.0	20	5	416 62	415 62

Burettes and Automatic Burettes



Graduation and reading

BLAUBRAND®
Schellbach Stripe
Ring marks at major graduations. Reading at point of contact of the two tips.

SILBERBRAND
Schellbach Stripe
Short marks at major graduations. Reading at point of contact of the two tips.

SILBERBRAND
Short marks at major graduations. Reading at lowest point of meniscus.

Specifications

Burettes and automatic burettes are always calibrated to deliver (TD, Ex).

Waiting times:
BLAUBRAND® – waiting time 30 sec. SILBERBRAND – no waiting time

Note:
A waiting time is usually not neccessary if a titration is performed (see DIN EN ISO 385).

All BLAUBRAND® burettes and automatic burettes are supplied with a batch number and an accompanying batch certificate in the original packaging. On request, they are available also with an individual certificate, USP individual certificate or DKD calibration certificate. (See pages 129 and 284 for more information on batch, individual and DKD certificates.)

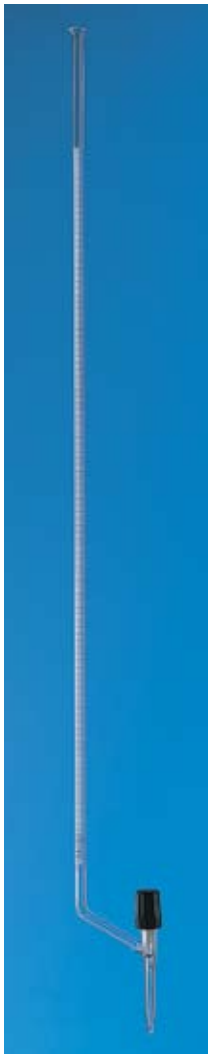
The needle-valve stopcock

PTFE valve spindle
Operates smoothly and is yet tight, even without lubrication, so there are no grease residues on the burette. The valve spindle is replaceable.

Tight seal without force
A gentle turn is all it takes to close the burette valve.

Precision burette tip

Precise drop by drop control. Drop size remains constant – from the first to the last drop. The liquid stream breaks off precisely and does not creep along the outside edge.



Burettes, lateral stopcock

BLAUBRAND®, class AS, conformity certified

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Incl. one batch certificate. Length approx. 800 mm. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Stopcock with	Cat. No.
10	0.02	0.02	PTFE spindle	138 44
25	0.05	0.03	PTFE spindle	138 47
50	0.1	0.05	PTFE spindle	138 48
10	0.02	0.02	Glass key	138 84
25	0.05	0.03	Glass key	138 87
50	0.1	0.05	Glass key	138 88

Burettes, straight stopcock

BLAUBRAND®, class AS, conformity certified

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Incl. one batch certificate. Length approx. 800 mm. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Stopcock with	Cat. No.
10	0.02	0.02	PTFE spindle	124 84
25	0.05	0.03	PTFE spindle	124 87
50	0.1	0.05	PTFE spindle	124 88
10	0.02	0.02	Glass key	124 64
25	0.05	0.03	Glass key	124 67
50	0.1	0.05	Glass key	124 68

Micro burettes, Bang pattern, lateral stopcock

BLAUBRAND®, class AS, conformity certified

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Incl. one batch certificate. Available with needle valve stopcock with PTFE spindle (PTFE key in intermediate stopcock) or STJ glass stopcock (glass key in intermediate stopcock). With base. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Stopcock with	Cat. No.
2	0.01	0.01	660	PTFE spindle	245 95
5	0.01	0.01	900	PTFE spindle	245 97
10	0.02	0.02	900	PTFE spindle	245 99
2	0.01	0.01	660	Glass key	245 45
5	0.01	0.01	900	Glass key	245 47
10	0.02	0.02	900	Glass key	245 49

Micro burettes, Bang pattern, straight stopcock

BLAUBRAND®, class AS, conformity certified

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Incl. one batch certificate. Available with needle valve stopcock with PTFE spindle (PTFE key in intermediate stopcock) or STJ glass stopcock (glass key in intermediate stopcock). Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Stopcock with	Cat. No.
2	0.01	0.01	600	PTFE spindle	242 65
5	0.01	0.01	820	PTFE spindle	242 67
10	0.02	0.02	820	PTFE spindle	242 69
2	0.01	0.01	600	Glass key	242 55
5	0.01	0.01	820	Glass key	242 57
10	0.02	0.02	820	Glass key	242 59

Burettes, lateral stopcock

SILBERBRAND, class B

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Length approx. 800 mm. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Stopcock with	Cat. No.
10	0.02	0.03	PTFE spindle	135 63
25	0.05	0.05	PTFE spindle	135 66
50	0.1	0.08	PTFE spindle	135 68
25	0.05	0.05	Glass key	135 06
50	0.1	0.08	Glass key	135 08

Burettes, straight stopcock

SILBERBRAND, class B

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Length approx. 800 mm. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Stopcock with	Cat. No.
10	0.02	0.03	PTFE spindle	120 93
25	0.05	0.05	PTFE spindle	120 96
50	0.1	0.08	PTFE spindle	120 98

Burettes, straight stopcock

SILBERBRAND, class B

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex).
Length approx. 800 mm. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Stopcock with	Cat. No.
10	0.02	0.03	PTFE spindle	120 83
25	0.05	0.05	PTFE spindle	120 86
50	0.1	0.08	PTFE spindle	120 88
10	0.02	0.03	Glass key	120 03
25	0.05	0.05	Glass key	120 06
50	0.1	0.08	Glass key	120 08

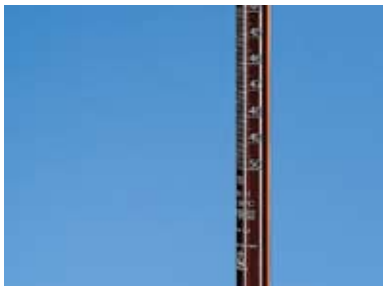
Burettes, straight stopcock

SILBERBRAND

DURAN®.
10 ml and 25 ml: Error limit according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Calibrated to deliver
(TD, Ex). Schellbach stripe. Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Stopcock with	Cat. No.
10*	0.05	0.05	470	Glass key	120 13
25*	0.1	0.08	520	Glass key	120 16
50	0.1	0.08	790	Glass key	120 18

* reduced distance between subdivision marks



Burettes, amber glass, lateral stopcock

SILBERBRAND

Borosilicate glass 5.4.
25 ml: Error limit according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Calibrated to deliver (TD, Ex). Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Stopcock with	Cat. No.
25*	0.1	0.08	550	PTFE key	120 56
50	0.1	0.10	800	PTFE key	120 58
25*	0.1	0.08	550	Glass key	120 52
50	0.1	0.10	800	Glass key	120 54

* reduced distance between subdivision marks

Burettes, amber glass, straight stopcock

SILBERBRAND

Borosilicate glass 5.4.
25 ml: Error limit according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Calibrated to deliver (TD, Ex). Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Stopcock with	Cat. No.
25*	0.1	0.08	550	PTFE key	135 36
50	0.1	0.10	800	PTFE key	135 38
25*	0.1	0.08	550	Glass key	135 32
50	0.1	0.10	800	Glass key	135 34

* reduced distance between subdivision marks

The Modular Burette Concept!

The Compact Burette from BRAND.

- **with PTFE stopcock**
- **fast to dismantle and easy to clean**
- **simple repair – all individual components replaceable!**

Compact Burettes

BLAUBRAND®, class AS, conformity certified

DURAN®, removable PTFE stopcock. DIN EN ISO 385. Calibrated to deliver (TD, Ex).
Items supplied: Burette tube with Schellbach stripe; Stopcock with precision tip.
Incl. one batch certificate. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
10	0.02	0.02	795	139 13
25	0.05	0.03	800	139 16
50	0.1	0.05	800	139 18

Compact Burettes

SILBERBRAND

AR-Glas®, removable PTFE stopcock. Error limits according to class B, DIN EN ISO 385.
Calibrated to deliver (TD, Ex). Items supplied: Burette tube with Schellbach stripe;
Stopcock with precision tip. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
10*	0.05	0.05	445	139 03
25*	0.1	0.08	510	139 06
50*	0.1	0.10	710	139 08

* reduced distance between subdivision marks

Compact Burettes, amber glass

SILBERBRAND

Borosilicate glass 5.4, removable PTFE stopcock.
25 ml: Error limit according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Calibrated to deliver (TD, Ex).
Items supplied: Burette tube with white graduation; Stopcock with precision tip. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
25*	0.1	0.08	520	139 26
50	0.1	0.10	790	139 28

* reduced distance between subdivision marks

Spare burette tubes

for the Compact burette

BLAUBRAND®, incl. batch certificate, Pack of 1.

Desription	Capacity ml	Length mm	Cat. No.
BLAUBRAND®, DURAN®	10	700	139 43
BLAUBRAND®, DURAN®	25	705	139 46
BLAUBRAND®, DURAN®	50	705	139 48
SILBERBRAND, AR-Glas®	10*	350	139 33
SILBERBRAND, AR-Glas®	25*	410	139 36
SILBERBRAND, AR-Glas®	50*	610	139 38
SILBERBRAND, amber glass	25*	425	139 56
SILBERBRAND, amber glass	50	695	139 58

* reduced distance between subdivision marks

Spare burette stopcock

for all Compact burettes and Compact automatic burettes

PTFE. With screw couplings and seals, without burette tip.
Pack of 1.

Cat. No.	118 05

Spare burette tips

for Compact burettes and Compact automatic burettes

Pack of 1.

For burettes ml	Desription	Cat. No.
10 ml	Borosilicate glass 3.3	115 10
25 ml	Borosilicate glass 3.3	115 11
50 ml	Borosilicate glass 3.3	115 12
25 and 50 ml, amber glass	Amber glass, Borosilicate glass 5.4	115 15

Compact burettes, 'Economy'

Burette tubes

SILBERBRAND

AR-Glas®. Error limits according to class B, DIN EN ISO 385. Calibrated to deliver (TD, Ex). Discharge tube with outer Ø 8 mm. For use with PTFE stopcock (Cat. No. 118 00). Pack of 2.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
25*	0.1	0.08	400	100 02
50*	0.1	0.10	620	100 04

* reduced distance between subdivision marks

PTFE stopcock

for burette tubes

With PP tip. Complete with mounting tool. Pack of 1.

Cat. No.	118 00

Spare burette tip

for PTFE stopcock

PP, with screw cap. Pack of 1.

Cat. No.	116 00

Automatic burettes, Dr. Schilling pattern

SILBERBRAND

Burette: AR-Glas®. Error limits according to class B, DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Automatic zeroing. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	With bottle ml	Total height mm	Cat. No.
10*	0.05	0.05	500	530	237 53
15*	0.1	0.08	500	510	237 55
25*	0.1	0.08	1000	620	237 56
50*	0.1	0.10	1000	830	237 58
25, amber glass	0.1	0.08	1000, amber	650	237 66
50, amber glass	0.1	0.10	1000, amber	900	237 68

* reduced distance between subdivision marks

- **Materials:**
  Filling tube: PVC
  Discharge tube: silicone
  Reservoir bottle: PE-LD
  Base: PE-HD
  Fitting, grey: Polyamide
  Micrometer screw: brass/PP
- Squeezing bottle allows rapid filling
- Automatic zeroing
- Micrometer screw allows fine titration
- Rough titration by releasing the micrometer screw and using the press button

Spare parts for automatic burettes, Dr. Schilling pattern

Spare burettes

Pack of 1.

Capacity ml	Length mm	Cat. No.
10	340	237 13
15	320	237 15
25	390	237 16
50	600	237 18
25, amber glass	420	237 23
50, amber glass	670	237 24

Bases

Pack of 1.

For bottle ml	Cat. No.
500	237 25
1000	237 28

Reservoir bottles

PE-LD. Narrow-mouth bottle with tube bushing. Pack of 1.

Capacity ml	Ø mm	Height mm	Thread GL	Cat. No.
500	75	180	25	1290 55
1000	94	212	28	1290 60
1000, amber	94	212	28	1302 60

Fittings

Micrometer screw with push-button, incl. support clamp. Pack of 1.

For capacity ml	for reservoir bottle ml	Cat. No.
10	500	237 45
15	500	237 46
25 - 50	1000	237 48

Glass discharge tip

AR-Glas®. with silicone tubing. Pack of 10.

Clear glass

Cat. No.	115 00

Amber glass

Cat. No.	115 05

Note!
Burettes not in use for longer periods should be drained and tubing pressure released by opening the stopcock.

Automatic burettes, Pellet pattern, with intermediate stopcock

BLAUBRAND®, class AS, conformity certified

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Incl. one batch certificate. Available with needle valve stopcock with PTFE spindle (PTFE key in intermediate stopcock) or STJ glass stopcock (glass key in intermediate stopcock). Automatic zeroing. Intermediate stopcock 4 NS/19 for recirculating residual liquid. Total height approx. 1m incl. 2000 ml bottle (soda-lime glass). Pack of 1.

Needle-valve stopcock (PTFE key in intermediate stopcock)

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
10	0.02	0.02	with bottle	227 64
25	0.05	0.03	with bottle	227 67
50	0.1	0.05	with bottle	227 68
10	0.02	0.02	without bottle	227 61
25	0.05	0.03	without bottle	227 62
50	0.1	0.05	without bottle	227 63

Glass stopcock (glass key in intermediate stopcock)

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
10	0.02	0.02	with bottle	227 34
25	0.05	0.03	with bottle	227 37
50	0.1	0.05	with bottle	227 38
10	0.02	0.02	without bottle	227 31
25	0.05	0.03	without bottle	227 32
50	0.1	0.05	without bottle	227 33

Automatic burettes, Pellet pattern, without intermediate stopcock

BLAUBRAND®, class AS, conformity certified

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe. Incl. one batch certificate. With needle-valve stopcock with PTFE spindle. Automatic zeroing. Total height approx. 1m incl. 2000 ml bottle (soda-lime glass). Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
10	0.02	0.02	with bottle	225 24
25	0.05	0.03	with bottle	225 28
50	0.1	0.05	with bottle	225 30
10	0.02	0.02	without bottle	225 21
25	0.05	0.03	without bottle	225 22
50	0.1	0.05	without bottle	225 23

Automatic burettes, Pellet pattern, without intermediate stopcock

SILBERBRAND, class B

DURAN®. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Schellbach stripe.
With needle-valve stopcock with PTFE spindle. Automatic zeroing.
Total height incl. 2000 ml bottle (soda-lime glass) approx. 1m. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
10	0.02	0.03	with bottle	219 14
25	0.05	0.05	with bottle	219 17
50	0.1	0.08	with bottle	219 18
10	0.02	0.03	without bottle	219 11
25	0.05	0.05	without bottle	219 12
50	0.1	0.08	without bottle	219 13

Automatic burettes, Pellet pattern, with intermediate stopcock

SILBERBRAND, amber glass

Borosilicate glass 5.4.
25 ml: Error limits according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Calibrated to deliver (TD, Ex). Available with titration stopcock with PTFE key (PTFE key in intermediate stopcock) or STJ glass stopcock (glass key in intermediate stopcock).
Automatic zeroing. Intermediate stopcock 4 NS/19 for recirculating residual liquid.
Total height approx. 1m incl. 2000 ml bottle (soda-lime glass). Pack of 1.

Titration and intermediate stopcock with PTFE key

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
25*	0.1	0.08	with bottle	223 32
50	0.1	0.10	with bottle	223 34
25*	0.1	0.08	without bottle	223 36
50	0.1	0.10	without bottle	223 38

* reduced distance between subdivision marks

Titration and intermediate stopcock with glass key

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
25*	0.1	0.08	with bottle	223 22
50	0.1	0.10	with bottle	223 24
25*	0.1	0.08	without bottle	223 26
50	0.1	0.10	without bottle	223 28

* reduced distance between subdivision marks

Automatic burettes, Pellet pattern, without intermediate stopcock

SILBERBRAND, amber glass

Borosilicate glass 5.4.
25 ml: Error limits according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Calibrated to deliver (TD, Ex). Available with titration stopcock with PTFE key or glass key.
Total height approx. 1m incl. 2000 ml bottle (soda-lime glass). Pack of 1.

Titration stopcock with PTFE key

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
25*	0.1	0.08	with bottle	223 12
50	0.1	0.10	with bottle	223 14
25*	0.1	0.08	without bottle	223 16
50	0.1	0.10	without bottle	223 18

* reduced distance between subdivision marks

Titration stopcock with glass key

Capacity ml	Subdivision ml	Error limit ± ml	Description	Cat. No.
25*	0.1	0.08	with bottle	223 02
50	0.1	0.10	with bottle	223 04
25*	0.1	0.08	without bottle	223 06
50	0.1	0.10	without bottle	223 08

* reduced distance between subdivision marks

Spare key for intermediate stopcock 4 NS/19

for automatic burette, pellet pattern

PTFE or borosilicate glass 5.4, with retention device. Pack of 1.

Description	Clear glass Cat. No.	Amber glass Cat. No.
PTFE key	812 65	812 65
Glass key	812 55	812 56

The Modular Automatic Burette Concept!

Compact Automatic Burettes from BRAND.

- **fast to dismantle and easy to clean**
- **easy to repair – all individual components replaceable!**

Please order supports, burette clamps and rubber bellows separately (s. pages 166-167).

Compact automatic burettes

NEW!

BLAUBRAND®, class AS, conformity certified

DURAN®, detachable PTFE stopcock. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Incl. one batch certificate. Items supplied: Burette tube with Schellbach stripe and automatic zeroing, stopcock with precision tip, filling tube (PVC, transparent), pumphead and 2000 ml bottle (soda-lime glass). Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
10	0.02	0.02	775	239 19
25	0.05	0.03	785	239 20
50	0.1	0.05	790	239 21

Compact automatic burettes

NEW!

SILBERBRAND

AR-Glas®, detachable PTFE stopcock. Error limits according to class B, DIN EN ISO 385. Calibrated to deliver (TD, Ex). Items supplied: Burette tube with Schellbach stripe and automatic zeroing, stopcock with precision tip, filling tube (PVC, transparent), pumphead and 2000 ml bottle (soda-lime glass). Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
10*	0.05	0.05	455	239 09
25*	0.1	0.08	520	239 10
50*	0.1	0.10	730	239 11

* reduced distance between subdivision marks

Compact automatic burettes, amber glass

NEW!

SILBERBRAND

Borosilicate glass 5.4, detachable PTFE stopcock. Calibrated to deliver (TD, Ex).
25 ml: Error limit according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Items supplied: Burette tube with white graduation and automatic zeroing, stopcock with precision tip, filling tube (PVC, transparent), pumphead and 2000 ml bottle (soda-lime glass). Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
25*	0.1	0.08	495	239 29
50	0.1	0.10	780	239 30

* reduced distance between subdivision marks

Please order supports, burette clamps and reservoir bottles separately (s. pages 166-167).

Compact automatic burettes

BLAUBRAND®, class AS, conformity certified

DURAN®, detachable PTFE stopcock. DIN EN ISO 385. Calibrated to deliver (TD, Ex). Incl. one batch certificate. Items supplied: Burette tube with Schellbach stripe and automatic zeroing, stopcock with precision tip, filling tube (PVC, transparent) and 1000 ml PE-bottle with base. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
10	0.02	0.02	775	238 19
25	0.05	0.03	785	238 20
50	0.1	0.05	790	238 21

Compact automatic burettes

SILBERBRAND

AR-Glas®, detachable PTFE stopcock. Error limits according to class B, DIN EN ISO 385. Calibrated to deliver (TD, Ex). Items supplied: Burette tube with Schellbach stripe and automatic zeroing, stopcock with precision tip, filling tube (PVC, transparent) and 1000 ml PE-bottle with base. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
10*	0.05	0.05	455	238 09
25*	0.1	0.08	520	238 10
50*	0.1	0.10	730	238 11

* reduced distance between subdivision marks

Compact automatic burettes, amber glass

SILBERBRAND

Borosilicate glass 5.4, detachable PTFE stopcock. Calibrated to deliver (TD, Ex).
25 ml: Error limit according to class B, DIN EN ISO 385.
50 ml: DIN EN ISO 385, class B.
Items supplied: Burette tube with white graduation and automatic zeroing, stopcock with precision tip, filling tube (PVC, transparent) and brown 1000 ml PE-bottle with base. Pack of 1.

Capacity ml	Subdivision ml	Error limit ± ml	Length mm	Cat. No.
25*	0.1	0.08	495	238 29
50	0.1	0.10	780	238 30

* reduced distance between subdivision marks

Spare burette tubes

for Compact automatic burettes with automatic zeroing

BLAUBRAND® , incl batch certificate, Pack of 1.

Description	Capacity ml	Length mm	Cat. No.
BLAUBRAND®, DURAN®	10	680	238 43
BLAUBRAND®, DURAN®	25	690	238 46
BLAUBRAND®, DURAN®	50	695	238 48
SILBERBRAND, AR-Glas®	10*	360	238 33
SILBERBRAND, AR-Glas®	25*	425	238 36
SILBERBRAND, AR-Glas®	50*	635	238 38
SILBERBRAND, amber glass	25*	400	238 66
SILBERBRAND, amber glass	50	685	238 68

* reduced distance between subdivision marks

(Burette clamps, see page 166-167)

Spare burette stopcock

for all Compact burettes and Compact automatic burettes

PTFE. With screw couplings and seals, without burette tip.
Pack of 1.

Cat. No.	118 05

Spare burette tips

for all Compact burettes and Compact automatic burettes

Pack of 1.

For burettes ml	Desription	Cat. No.
10 ml	Borosilicate glass 3.3	115 10
25 ml	Borosilicate glass 3.3	115 11
50 ml	Borosilicate glass 3.3	115 12
25 and 50 ml, amber glass	Amber glass, borosilicate glass 5.4	115 15

Spare filling tube

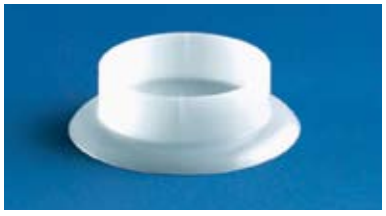
PVC, transparent.
Inner-Ø 5 mm, Outer-Ø 7 mm, length 1 m.
Pack of 1.

Cat. No.	115 25

Bases

Pack of 1.

For bottle ml	Cat. No.
500	237 25
1000	237 28



Reservoir bottles

PE-LD. Narrow-mouth bottle with tube bushing. Pack of 1.

Capacity ml	Ø mm	Height mm	Thread GL	Cat. No.
500	75	180	25	1290 55
1000	94	212	28	1290 60
1000, amber	94	212	28	1302 60

Spare reservoir bottles for automatic burettes

Available in clear or amber glass

DURAN® or soda-lime glass. Capacity 2000 ml. Pack of 1.

Material	Ø mm	Height mm	Neck size	Description	Cat. No.
DURAN®	160	200	29/32	Clear glass	233 10
DURAN®	160	200	29/32	Amber glass	233 20
Soda-lime glass	160	200	29/32	Clear glass	1269 65
Soda-lime glass	160	200	29/32	Amber glass	1270 65

Pumphead

for glass reservoir bottle, compact automatic burette

DURAN®. NS 29/32. Fitting length 185 mm. nozzle outer diameter 7 mm. Pack of 1.

Description	Cat. No.
Clear glass	238 75
Amber glass	238 76

Rubber bellows

for automatic burettes

Orange colored, single-bulb rubber bellows. With valve and tubing. Pack of 1.

Cat. No.	234 00

Joint Clip

Stainless-steel Neck size 29/32. Pack of 1.

Cat. No.	556 18

Burette clamps

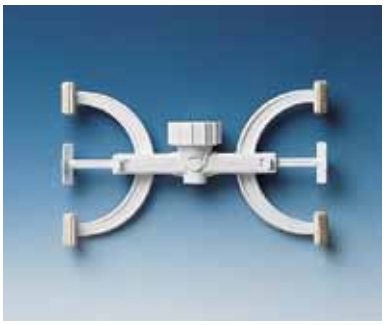
Zinc alloy, nickel-plated. PVC-coated clamps. Pack of 1.

Description	Cat. No.
for 1 burette	165 15
for 2 burettes	165 20

Burette clamp

Castaloy® alloy. Two burettes up to 50 ml can be mounted in seconds. PVC-coated clamps provide a secure grip. Comfortable height adjustment. Graduations remain visible. Very sturdy design, easy to operate. Integral support connector. Ideal for use with burette support (Cat. No. 5778 91). Pack of 1.

Cat. No.	5779 00



Burette clamps

PP, white. To be mounted on support rods of 8 to 14 mm Ø. Easily affixes the burette by clamping with a non-corroding spring. Pack of 1.

Description	Cat. No.
for 1 burette	165 05
for 2 burettes	165 10

Burette support

Baseplate: PP with rubber feet minimize sliding and protect bench-top. Support rod: Stainless steel. Includes baseplate 210 x 55 mm (L x W). Support rod 550 x 12 mm (L x diameter) Pack of 1.

Cat. No.	238 82

Burette covers

PP. Ribbed inside to prevent suction attachment during titration. Pack of 10.

Inner Ø mm	Height mm	Cat. No.
20	30	164 00

Spare burette stopcocks

Needle-valve stopcocks

BISTABIL, DURAN®/PTFE

Valve housing with precision DURAN® burette tip. Interchangeable PTFE valve spindle, PP cap and retention device. Valve opening 0-2.5 mm. Pack of 1.

For burette capacity ml	Lateral needle-valve stopcock Cat. No.	Straight needle-valve stopcock Cat. No.
2 - 10	821 20	822 20
25	821 21	822 21
50	821 22	822 22
Spare spindle with retention for ml		
2 - 50	821 70	821 70

Glass stopcocks

BISTABIL, DURAN®

Stopcock housing with precision DURAN® burette tip. Interchangeable borosilicate glass stopcock key with retention device. Stopcock size 3NS/12. Pack of 1.

For burette capacity ml	DURAN® Lateral stopcock Cat. No.	DURAN® Straight stopcock Cat. No.
2 - 10	818 05	818 15
25	818 07	818 17
50	818 09	818 19
Spare key with retention for ml		
2 - 10	811 40	810 53
25	811 41	810 53
50	811 42	810 53

Glass stopcocks, amber glass

BISTABIL, Borosilcate glass 5.4

Stopcock housing with burette tip. Interchangeable PTFE or borosilicate glass key with retention device. Stopcock size 3NS/12. Pack of 1.

For burette capacity ml	Lateral stopcock PTFE key Cat. No.	Lateral stopcock Glass key Cat. No.	Straight stopcock PTFE key Cat. No.	Straight stopcock Glass key Cat. No.
25	819 27	819 07	819 37	819 17
50	819 27	819 09	819 39	819 19
Spare key with retention for ml				
25	811 67	811 46	812 48	812 47
50	811 67	811 47	812 48	812 47